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Patent
Gaymar 0-03-123

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor:	Flick et al.	Title:	Stand Alone Integrated Cushion
Serial no.:	10/608,649	Examiner:	F. Conley
Filed:	June 27, 2003	Art Unit:	3673

Amendment and Response

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir/Madam:

This response is in reply to the third non-final office action that was mailed on December 14, 2004.

In the office action, the examiner allowed claims 12-17, objected to claim 9, and rejected claims (a) 1-4 as being unpatentable over Newkirk et al. in view of Miller et al., (b) 5-8 and 10 as being unpatentable over Newkirk et al. in view of Miller et al. and further in view of Stacy et al.; and (c) 11 as being unpatentable over Newkirk et al. in view of Miller et al., further in view of Stacy et al. and further in view of Shafer et al. Applicant appreciates that claims 12-17 are now deemed allowable.

As for the rejection of claims 1-4 which is based on Newkirk et al. in view of Miller et al., applicant respectfully traverses. We direct the examiner's attention to claim 1, which reads as follows:

1. A stand alone integrated mattress comprising:
a self-contained mattress unit having at least a head section and a foot section, and capable of converting from a horizontal position or an inclined position to a chair-like conformation;
at least one inflatable bladder in each section of the self-contained mattress unit;
at least one fluid source;
at least one dispersion unit in each section and each dispersion unit provides a fluid, obtained from the fluid source, to a conduit which directs the fluid into the inflatable bladder positioned in the section of the dispersion unit;
a control system positioned in one of the sections and interconnected to each dispersion unit to control the dispersion of the fluid to the inflatable bladders in each section.

Emphasis added.

The self-contained mattress of the presently claimed invention has a head section and a

1. (Original) A stand alone integrated mattress comprising:
a self-contained mattress unit having at least a head section and a foot section, and capable of converting from a horizontal position or an inclined position to a chair-like conformation;
at least one inflatable bladder in each section of the self-contained mattress unit;
at least one fluid source;
at least one dispersion unit in each section and each dispersion unit provides a fluid, obtained from the fluid source, to a conduit which directs the fluid into the inflatable bladder positioned in the section of the dispersion unit;
a control system positioned in one of the sections and interconnected to each dispersion unit to control the dispersion of the fluid to the inflatable bladders in each section.
2. (Original) The stand alone integrated mattress of claim 1 wherein the at least one fluid source is ambient air.
3. (Original) The stand alone integrated mattress of claim 1 wherein the at least one fluid source is selected from the group consisting of a reservoir, ambient air and combinations thereof.
4. (Original) The stand alone integrated mattress of claim 1 wherein the fluid is selected from the group consisting of air and an aqueous solution.
5. (Original) The stand alone integrated mattress of claim 1 wherein the inflatable bladders are capable of vibrating, rotating, creating wave motions, providing not direct percussion, providing support, and combinations thereof to a user of the mattress.
6. (Original) The stand alone integrated mattress of claim 1 wherein the control system has an input unit that allows an operator to input data to control at least the inflation and/or deflation of the inflatable bladders.
7. (Original) The stand alone integrated mattress of claim 6 wherein the input unit is interconnected to the control unit as an integrated component thereof.
8. (Original) The stand alone integrated mattress of claim 6 wherein the input unit is interconnected to the control unit by a tethered electrical connection.
9. (Original) The stand alone integrated mattress of claim 6 wherein the input unit is interconnected to the control unit through an electrically connected hinge.
10. (Original) The stand alone integrated mattress of claim 6 wherein the input unit has a SIMM daughter board that interconnects to the control unit.

11. (Previously Presented) The stand alone integrated mattress of claim 6 wherein the input unit transmits a remote wireless signal to a receiver on the control unit.
12. (Original) A stand alone integrated mattress comprising:
 - a mattress unit having at least a head section and a foot section;
 - at least one inflatable bladder in each section of the self-contained mattress unit;
 - at least one fluid source;
 - at least one dispersion unit in the mattress and the dispersion unit provides a fluid, obtained from the fluid source, to a conduit which directs the fluid into the inflatable bladder;
 - a control system positioned in one of the sections and interconnected to each dispersion unit to control the dispersion of the fluid to the inflatable bladders
 - wherein the control system has an input unit that allows an operator to input data to control at least the inflation and/or deflation of the inflatable bladders
 - wherein the input unit is selected from the group consisting of the input unit (1) is interconnected to the control unit by a tethered electrical connection, (2) transmits a remote signal to a receiver on the control unit, (3) has a SIMM daughter board that interconnects to the control unit, or (4) is interconnected to the control unit through an electrically connected hinge.
13. (Original) The mattress of claim 12 wherein the mattress unit is a self-contained capable of converting from a horizontal position or an inclined position to a chair-like conformation;
 - wherein each section has at least one dispersion unit and each dispersion unit provides the fluid, obtained from the fluid source, to the conduit which directs the fluid into the inflatable bladder positioned in the section of the dispersion unit;
 - the control system positioned in one of the sections and interconnected to each dispersion unit to control the dispersion of the fluid to the inflatable bladders in each section.
14. (Original) The mattress of claim 13 wherein at least one fluid source is ambient air.
15. (Original) The mattress of claim 13 wherein the at least one fluid source is selected from the group consisting of a reservoir, ambient air and combinations thereof.
16. (Original) The mattress of claim 13 wherein the fluid is selected from the group consisting of air and an aqueous solution.
17. (Original) The mattress of claim 13 wherein the inflatable bladders are capable of vibrating, rotating, creating wave motions, providing percussion, providing support, and combinations thereof to a user of the mattress.

foot section and is able to adjust from a horizontal (or inclined) position to a chair-like conformation. The self-contained mattress also has bladders and at least one dispersion unit in each section. The self-contained mattress also has a control system in at least one of the sections and is interconnected to each dispersion unit. The bladders, the dispersion units, and the control system are all within the self-contained mattress.

The problems with the Newkirk et al. have been discussed in the prior responses, and that reads as follows:

Newkirk discloses a Conversion mattress. As stated in the specification, a conversion mattress is able to alter its position from a horizontal (or inclined) position to a chair-like conformation. The examiner wrote that Newkirk discloses “at least one fluid source (col. 2 lines 33-38).” That fluid source, as defined by the examiner, reads as follows:

Each bladder has a tube 40 by which bladders are inflated. As shown in FIG. 2, the respective **tubes 40 extend** between the two plies **to the notch 30** and then exit transversely out of the mattress where they are connected to a pump having suitable controls for their inflation. The controls may be mounted on an armrest panel 42 as shown in FIG.1.

That means the pump is out of the mattress. The term “out of the mattress” is the opposite of the term “self-contained mattress” as claimed.

Why must the pump in the Newkirk reference be “out of the mattress”? Newkirk fails to provide an explanation but it should be noted that Newkirk only discloses one pump, not various dispersion units and a control system as claimed. That pump is interconnected to tubes 40. The tubes are interconnected to the bladders in the head section, not the foot section. The tubes “extend . . . to the notch.” Notice that we highlighted that Newkirk stated the tubes do not penetrate beyond the notch. Why does Newkirk limit the tubes from going through the notch or the area that notoriously kinks tubes? Again, we are not sure exactly sure why but we assume it is to avoid kinking in the tubes because that seems obvious. By having the pump outside the mattress and the tubes not extending through the notch area, Newkirk avoids any and all kinking problems.

As previously stated in the specification, kinking is a serious problem with a self-contained Convertible mattresses – which Newkirk is not and which the examiner agrees when the examiner wrote, Newkirk et al. “fails to discloses a dispersion unit in each section and a control system.” That “notch area” causes kinking problems especially if there is just one dispersion unit with tubes that must traverse through the “notch area.”

Again as previously stated, there are few if no self-contained convertible mattress systems because of the kinking problem. It is obvious that Newkirk was avoiding the kinking problem by having the pump positioned outside the mattress and not having the

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tubes going through the notch area.

The examiner then relies on Miller et al. to disclose a self-contained mattress system. Miller et al.'s system is a self-contained system in a NON-Conversion Mattress. A Non-Conversion Mattress remains in a single plane, and has no notches that can kink hoses that protrude from one end of the bed to the other. There not one teaching, disclosure or suggestion that Miller et al.'s system can ever be used in a conversion mattress. No where does Miller et al. teach, suggest or disclose that its system can solve at least the kinking hose problem that is present with conversion mattresses – Newkirk et al. use a non-self-contained mattress system to avoid the kinking problem that is present with a notch of a conversion mattress.

At least that problem is solved with the present claimed invention. In view of the above facts, Newkirk in view of Miller et al. fail to disclose, suggest or teach the claimed invention, as claimed and taught by applicants.

The other cited references were relied upon by the examiner for different purposes than the failings set forth above. Moreover, none of the cited references disclose the instant invention or any self-contained conversion mattress unit as claimed. Accordingly, we will not address these references in this response.

In view of this response, it is respectfully submitted that the instant application is now in condition for allowance and that such allowance is earnestly requested.

Date: 1/11/05

Respectfully submitted

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